

## **REMARKS**

Claims 1, 2, 5-7, 10-12, 16-20, and 22 are pending in the application.

Claims 1, 2, 5-7, 10-12, 16-18, 20, and 22 are currently amended, and claims 3, 8, 9, 14, 15, and 21 are canceled. Applicants respectfully submit that no new matter is added to currently amended claims 1, 2, 5-7, 10-12, 16-18, 20, and 22.

Claims 1 and 12 stand rejected under 35 U.S.C. §112, first paragraph.

Claims 1 and 12 stand rejected under 35 U.S.C. §112, second paragraph.

Claims 1-13, 16-22, and 24-26 stand rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent Application Publication No. 2002/0120763 to Miloushev et al., hereinafter, Miloushev, in view of IETF RFC 1094 ("Network File System Protocol Specification", version 2.0), hereinafter, RFC 1094, and further in view of U.S. Patent Application Publication No. 2003/0051055 to Parrella et al., hereinafter, Parrella.

Applicants respectfully traverse the rejections based on the following discussion.

### **I. The 35 U.S.C. §112, First Paragraph, Rejection**

[0001] Claims 1 and 12 stand rejected under 35 U.S.C. §112, first paragraph.

[0002] With regard to claims 1 and 12, the Office Action states that the phrase, "wherein a data size of said multiple Ethernet packets received exceeds that of a maximum size supported by a Network File System (NFS) protocol", lacks support for the Specification.

[0003] Applicants have currently amended independent claims 1 and 12 to delete the phrase, "wherein a data size of said multiple Ethernet packets received exceeds that of a maximum size supported by a Network File System (NFS) protocol", from the claims.

[0004] For at least the reasons outlined above, Applicants respectfully submit that independent claims 1 and 12, as currently amended, satisfy the written description requirement of 35 U.S.C. §112, first paragraph. Withdrawal of the rejection of claims 1 and 12 under 35 U.S.C. §112, first paragraph, is respectfully solicited.

## **II. The 35 U.S.C. §112, Second Paragraph, Rejection**

[0005] Claims 1 and 12 stand rejected under 35 U.S.C. §112, second paragraph.

[0006] With regard to claims 1 and 12, the Office Action states that the phrase, "wherein a data size of said multiple Ethernet packets received exceeds that of a maximum size supported by a Network File System (NFS) protocol", is unclear.

[0007] Applicants have currently amended independent claims 1 and 12 to delete the phrase, "wherein a data size of said multiple Ethernet packets received exceeds that of a maximum size supported by a Network File System (NFS) protocol", from the claims.

[0008] For at least the reasons outlined above, Applicants respectfully submit that independent claims 1 and 12, as currently amended, particularly point out and distinctly claim the subject matter which Applicants regard as the invention, and thus, satisfy the statutory requirements of 35 U.S.C. §112, second paragraph. Withdrawal of the rejection of claims 1 and 12 under 35 U.S.C. §112, second paragraph, is respectfully solicited.

## **III. The 35 U.S.C. 103(a) Rejection over Miloushev, RFC 1094, and Parrell**

### **A. The Miloushev Disclosure**

[0009] Miloushev discloses a network node that aggregates namespaces of multiple independent file servers and presents them as a single, unambiguous namespace to network clients by switching file protocol transactions initiated by said clients among said servers using only file system paths contained in said transactions and information available within said network node at the time the switching decision is being made. (Paragraph [0061], which is cited by the Office Action).

### **B. The RFC 1094 Disclosure**

[0010] RFC 1094 discloses a Sun Network Filesystems (NFS) protocol that provides transparent remote access to shared files across networks. The NFS protocol is designed to be portable across different machines, operating systems, network architectures, and transport protocols. This portability is achieved through the use of Remote Procedure Call (RPC) primitives built on top of an eXternal Data Representation (XDR). Implementations already

exist for a variety of machines, from personal computers to supercomputers.

### **C. The Parrella Disclosure**

[0011] Parrella discloses that typical web pages contain a HyperText markup Language (HTML) document, and many embedded images. The conventional behavior for a browser is to fetch the base HTML document, and then, after receipt of the base document, the browser does a second fetch of the many embedded objects, which are typically located on the same web server. Each embedded object, i.e., application data unit, is put into a TCP data unit and each TCP data unit is divided into one or more IP packets. Sending many TCP/IP packets for the many embedded objects rather than, e.g., one large TCP/IP packet, means that the network spends more time than is necessary in sending the control data, in other words, the control data/ to application data/time time ratio is too large. It is more efficient to combine the many embedded objects into one large application data unit and then create one (or at least a minimum number of) large TCP data unit. For the one large TCP data unit the maximum transmission unit (MTU) for the link between this sender super module and the next receiver super module is used for the IP packet(s). (Paragraph [0060], lines 1-20, which are cited by the Office Action).

### **D. Arguments**

[0012] Currently amended, independent claim 1 recites in relevant part,

"a plurality of external connection paths for facilitating direct communication between said network-attached store computers and said client computer,

wherein said plurality of virtualizers implement communications translation between said plurality of client computers accessing said plurality of network-attached store computers, and

wherein said communications translation comprises any of:

translation from one network-attached store protocol to a different network-attached store protocol;

translation from a connection-oriented network attached store protocol to a packet-oriented network-attached store protocol; and

translation from a packet-oriented network-attached store protocol to a connection-oriented network-attached store protocol".

Similarly, currently amended, independent claim 12 recites in relevant part,

"facilitating direct communication between said network-attached store computers and said client computer via a plurality of external connection paths,

wherein said plurality of virtualizers implement communications translation between said plurality of client computers accessing said plurality of network-attached store computers, and

wherein said communications translation comprises any of:

translation from one network-attached store protocol to a different network-attached store protocol;

translation from a connection-oriented network attached store protocol to a packet-oriented network-attached store protocol; and

translation from a packet-oriented network-attached store protocol to a connection-oriented network-attached store protocol".

[0013] Miloushev merely discloses a network node that aggregates namespaces of multiple independent file servers and presents them as a single, unambiguous namespace to network clients by switching file protocol transactions initiated by said clients among said servers using only file system paths contained in said transactions and information available within said network node.

[0014] In contrast, the present invention clearly describes 1) direct communication paths between the network-attached store computers, which are allegedly analogized to the independent file servers of Miloushev, and the client computer, and 2) virtualizers that implement communications translation between client computers accessing network-attached store computers in which the communications translation comprises any of: translation from one network-attached store protocol to a different network-attached store protocol; translation from a connection-oriented network attached store protocol to a packet-oriented network-attached store

protocol; and translation from a packet-oriented network-attached store protocol to a connection-oriented network-attached store protocol.

[0015] Nowhere does Miloushev disclose, teach or suggest at least the present invention's features of: "a plurality of external connection paths for facilitating direct communication between said network-attached store computers and said client computer, wherein said plurality of virtualizers implement communications translation between said plurality of client computers accessing said plurality of network-attached store computers, and wherein said communications translation comprises any of: translation from one network-attached store protocol to a different network-attached store protocol; translation from a connection-oriented network attached store protocol to a packet-oriented network-attached store protocol; and translation from a packet-oriented network-attached store protocol to a connection-oriented network-attached store protocol", as recited in currently amended, independent claim 1; and "facilitating direct communication between said network-attached store computers and said client computer via a plurality of external connection paths, wherein said plurality of virtualizers implement communications translation between said plurality of client computers accessing said plurality of network-attached store computers, and wherein said communications translation comprises any of: translation from one network-attached store protocol to a different network-attached store protocol; translation from a connection-oriented network attached store protocol to a packet-oriented network-attached store protocol; and translation from a packet-oriented network-attached store protocol to a connection-oriented network-attached store protocol", as recited in currently amended, independent claim 12.

[0016] Instead, Miloushev merely discloses a network node that aggregates namespaces of multiple independent file servers and presents them as a single, unambiguous namespace to network clients by switching file protocol transactions initiated by said clients among said servers using only file system paths contained in said transactions and information available within said network node.

[0017] RFC 1094 does not cure the deficiencies of Miloushev argued above.

[0018] RFC 1094 merely discloses a Sun Network Filesystems (NFS) protocol that provides transparent remote access to shared files across networks.

[0019] In contrast, the present invention clearly describes 1) direct communication paths between the network-attached store computers and the client computer, and 2) virtualizers that implement communications translation between client computers accessing network-attached store computers in which the communications translation comprises any of: translation from one network-attached store protocol to a different network-attached store protocol; translation from a connection-oriented network attached store protocol to a packet-oriented network-attached store protocol; and translation from a packet-oriented network-attached store protocol to a connection-oriented network-attached store protocol.

[0020] Nowhere does RFC 1094 disclose, teach or suggest at least the present invention's features of: "a plurality of external connection paths for facilitating direct communication between said network-attached store computers and said client computer, wherein said plurality of virtualizers implement communications translation between said plurality of client computers accessing said plurality of network-attached store computers, and wherein said communications translation comprises any of: translation from one network-attached store protocol to a different network-attached store protocol; translation from a connection-oriented network attached store protocol to a packet-oriented network-attached store protocol; and translation from a packet-oriented network-attached store protocol to a connection-oriented network-attached store protocol", as recited in currently amended, independent claim 1; and "facilitating direct communication between said network-attached store computers and said client computer via a plurality of external connection paths, wherein said plurality of virtualizers implement communications translation between said plurality of client computers accessing said plurality of network-attached store computers, and wherein said communications translation comprises any of: translation from one network-attached store protocol to a different network-attached store protocol; translation from a connection-oriented network attached store protocol to a packet-oriented network-attached store protocol; and translation from a packet-oriented network-attached store protocol to a connection-oriented network-attached store protocol", as recited in currently amended, independent claim 12.

[0021] Instead, RFC 1094 merely discloses a Sun Network Filesystems (NFS) protocol that provides transparent remote access to shared files across networks.

[0022] Parrella does not cure the deficiencies of Miloushev and RFC 1094 argued above.

[0023] Parrella merely discloses that sending many TCP/IP packets for many embedded objects rather than, e.g., one large TCP/IP packet, means that the network spends more time than is necessary in sending the control data, in other words, the control data/ to application data/time time ratio is too large. It is more efficient to combine the many embedded objects into one large application data unit and then create one (or at least a minimum number of) large TCP data unit.

[0024] Nowhere does Parrella disclose, teach or suggest at least the present invention's features of: "a plurality of external connection paths for facilitating direct communication between said network-attached store computers and said client computer, wherein said plurality of virtualizers implement communications translation between said plurality of client computers accessing said plurality of network-attached store computers, and wherein said communications translation comprises any of: translation from one network-attached store protocol to a different network-attached store protocol; translation from a connection-oriented network attached store protocol to a packet-oriented network-attached store protocol; and translation from a packet-oriented network-attached store protocol to a connection-oriented network-attached store protocol", as recited in currently amended, independent claim 1; and "facilitating direct communication between said network-attached store computers and said client computer via a plurality of external connection paths, wherein said plurality of virtualizers implement communications translation between said plurality of client computers accessing said plurality of network-attached store computers, and wherein said communications translation comprises any of: translation from one network-attached store protocol to a different network-attached store protocol; translation from a connection-oriented network attached store protocol to a packet-oriented network-attached store protocol; and translation from a packet-oriented network-attached store protocol to a connection-oriented network-attached store protocol", as recited in currently amended, independent claim 12.

[0025] Instead, Parrella merely discloses that sending many TCP/IP packets for many embedded objects rather than, e.g., one large TCP/IP packet, means that the network spends

more time than is necessary in sending the control data, in other words, the control data/ to application data/time time ratio is too large. It is more efficient to combine the many embedded objects into one large application data unit and then create one (or at least a minimum number of) large TCP data unit.

[0026] For at least the reasons outlined above, Applicants respectfully submit that Miloushev, RFC 1094 and Parrella, either individually or in combination, disclose, teach or suggest at least the present invention's features of: "a plurality of external connection paths for facilitating direct communication between said network-attached store computers and said client computer, wherein said plurality of virtualizers implement communications translation between said plurality of client computers accessing said plurality of network-attached store computers, and wherein said communications translation comprises any of: translation from one network-attached store protocol to a different network-attached store protocol; translation from a connection-oriented network attached store protocol to a packet-oriented network-attached store protocol; and translation from a packet-oriented network-attached store protocol to a connection-oriented network-attached store protocol", as recited in currently amended, independent claim 1; and "facilitating direct communication between said network-attached store computers and said client computer via a plurality of external connection paths, wherein said plurality of virtualizers implement communications translation between said plurality of client computers accessing said plurality of network-attached store computers, and wherein said communications translation comprises any of: translation from one network-attached store protocol to a different network-attached store protocol; translation from a connection-oriented network attached store protocol to a packet-oriented network-attached store protocol; and translation from a packet-oriented network-attached store protocol to a connection-oriented network-attached store protocol", as recited in currently amended, independent claim 12. Accordingly, Miloushev, RFC 1094 and Parrella, either individually or in combination, fail to render obvious the subject matter of currently amended, independent claims 1 and 12, and dependent claims 2, 5-7, 10, 11, 16-20, and 22 under 35 U.S.C. §103(a). The rejection of canceled claims 3, 8, 9, 14, 15, and 21 is moot. Withdrawal of the rejection of claims 1-13, 16-22, and 24-26 under 35 U.S.C. §103(a) as unpatentable over Miloushev, RFC 1094 and Parrella is respectfully solicited.



## **V. Formal Matters and Conclusion**

Claims 1, 2, 5-7, 10-12, 16-20, and 22 are pending in the application.

Applicants respectfully submit that the currently amended claims fulfill the requirements of 35 U.S.C. §112, first and second paragraphs.

With respect to the rejections of the claims over the cited prior art, Applicants respectfully argue that the currently amended claims are distinguishable over the prior art of record. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections to the claims.

In view of the foregoing, Applicants submit that claims 1, 2, 5-7, 10-12, 16-20, and 22, all the claims presently pending in the application, are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest time possible.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary.

Please charge any deficiencies and credit any overpayments to Attorney's Deposit Account Number 09-0441.

Respectfully submitted,

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